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What is claimed is:

- 1. A voice storage device comprising:
- a storage means that stores a voice signal, and
- a voice compression means that compresses the voice signal requiring a re-coding compression, of the voice signal stored in the storage means, in accordance with a compression degree and a significance of the voice signal.
- 2. A voice storage device as claimed in Claim 1, wherein the storage means stores the voice signal packeted by each coding type.
- 3. A voice storage device as claimed in Claim 1,
 20 further comprising a real time processing means that
 stores a voice signal in real time in the storage
 means, and a non-vocalization interval detection
 means that determines a significance of the voice
 signal in accordance with whether the voice signal
 corresponds to a vocalization interval or to a
 non-vocalization interval, at an independent timing
 from a processing by the real time processing means.
- 4. A voice storage device as claimed in Claim 3, 30 wherein, when a voice signal stored in the storage means corresponds to the vocalization interval, the

non-vocalization interval detection means increases the significance of a voice signal before and after the vocalization interval.

5. A voice storage device as claimed in Claim 1, wherein the voice compression means compresses a voice signal in parallel to a storage of the voice signal in real time in accordance with a storage capacity of the storage means.

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- 6. A voice storage device as claimed in Claim 1, further comprising a record means that records whether or not a voice signal is read more than once from the storage means, wherein the significance of a voice signal once read is decreased.
- 7. A voice storage device as claimed in Claim 6, wherein, when the voice signal once read is read again, the significance is not changed.

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- 8. A voice storage device as claimed in Claim 6, wherein, even when the significance of a voice signal is changed, whether the significance is changed or not is determined in accordance with a storage capacity of the storage means.
- 9. A voice storage device as claimed in Claim 1, wherein the voice compression means includes a quantization table generation means that scans a voice signal stored in the storage means, and

generates a quantization table for a coding compression.

10. A voice storage device as claimed in Claim 9, wherein the quantization table is packeted to be stored in the storage means, when a voice signal is read from the storage means, if the quantization table is made from the voice signal, the voice signal is decoded by using the quantization table.

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- 11. A voice storage device as claimed in Claim
 1, wherein the voice compression means executes a
 coding to a voice signal, in which the coding is
 divided into one using a code essential to decoding
 the voice signal and another one using a code to
 improve a sound quality of a decoded voice.
- 12. A voice coding device comprising:

 an LSP quantizer that quantizes LSP parameters;

 an LSP multi-stage quantizer that quantizes

 quantization error components that the LSP quantizer
 is impossible to express;

a pitch component coder that attains pitch components from linear predictive errors;

an excitation source coder in which an excitation source is configured with a multi-stage code book;

an essential code output unit that outputs a code essential to decoding from the output of the LSP quantizer, the pitch component coder, and the excitation source coder; and

a sound quality improving code output unit that outputs a code to improve a decoded sound quality from the output of the LSP multi-stage quantizer and the excitation source coder.